

DRAFT

A meeting of the New Hampshire Water Well Board was held on October 9, 2008 at 9:00 AM, in rooms 112 & 113, 29 Hazen Drive, Concord NH, 03302.

Present were: Bart Cushing, Chairman

Rene Pelletier, Secretary (arrived 9:25 am.)

Board Members: Jeffrey Tasker, Peter Caswell, Thomas Garside, David Wunsch, and
Stephen Smith

NHDES Staff: Richard Schofield and Allyson Gourley

Chairman Cushing brought the meeting to order at 9:03 AM.

Approval of Minutes

9/11/08 Meeting: Allyson Gourley explained that the typographical errors that appeared in the draft Minutes were the result of merging a revised draft with the existing document. She told the Board that the errors had been corrected.

Upon motion by Mr. Tasker and seconded by Mr. Caswell, the Board unanimously voted to accept the corrected Minutes of the meeting.

Chairman Cushing addressed the Board. Since this was his last meeting he wanted to share his thoughts on the culmination of their time and efforts together. He told the Membership that their mission is to protect the public and water resources. He stressed the importance of continued scrutiny with regard to the license applicants to make sure they are qualified. "If the Board does not hold the applicants to a high standard, that could set a precedent." He reminded the Board of past problems they had dealt with that had been the result of unqualified contractors. He urged the Board to make sure that the information being provided on applications is correct to assure accountability. He commended the Board on the job they were doing and said he was fortunate to have been their Chairman.

Chairman Cushing told the Membership that the biggest challenges they will face at this time will be related to the economy. He predicts that the Board may start to receive a larger number of complaints due to contractors trying to cut corners in order to save money. He also commented on the emerging geothermal industry, saying that it is very important that the Board carefully review the MSDS documents (*material safety data sheets*) on the materials being used as refrigerants, to assure that groundwater is being protected.

Chairman Cushing also discussed the issue of private well testing currently being considered. He urged the Board to be involved in the decision making process because, he said "*the devil is in the details*". Some individuals are suggesting that private well testing be mandatory rather than recommended. This testing could become the

responsibility of the well contractors and could be very expensive depending on which parameters are included.

Chairman Cushing thanked Rick Schofield and Chip Mackey for their help in supporting the Water Well Board. He commended Mr. Schofield for his thoroughness and the well organized information packets that he prepares for the Board members before each meeting.

In closing, he talked about the term limits for Board members. He pointed out that the DES members are not subject to term limits. He stressed the importance of the contractor-members maintaining a leadership role on the Board.

Elections

Chairman Cushing introduced the newest member of the Board, Stephen Smith, who will replace his seat as the Pump Installers Representative. Then he solicited nominations for his successor as Chairman of the Board.

Chairman Cushing and Mr. Schofield answered questions regarding term limits. They explained that the Membership term is 3 years with a limit of 2 consecutive terms. Mr. Schofield explained that the terms for different positions are “staggered” so they do not all expire at the same time.

Mr. Caswell nominated Mr. Tasker for the position of Chairman. Mr. Smith seconded the motion to nominate Mr. Tasker for Chairman.

Mr. Smith nominated Rene Pelletier for the position of Secretary. The motion was seconded by Mr. Tasker.

Mr. Schofield read the ballots. Mr. Tasker was unanimously elected to the position of Chairman. Mr. Pelletier was unanimously re-elected to the position of Secretary.

Mr. Schofield thanked Chairman Cushing for his 6 years of service to the citizens of NH. He commended him for taking an active role, and especially for his citizen participation with the licensing program. He summarized by saying that Chairman Cushing had done a fine job and had made a significant contribution to the industry and the Water Well Program.

Before Chairman Cushing relinquished his position on the Chair, a photograph was taken of the Board. Then Mr. Tasker took the Chairman’s seat.

Old Business

Geothermal Wells – DX Systems

Mr. Schofield introduced Mitch Locker of the NHDES. Mr. Locker works with the Underground Injection Control (“UIC”) Program and he is responsible for registering all geothermal systems, including DX systems.

Rene Pelletier joined the meeting at 9:25.

Mr. Locker provided the Board members with a handout about DX systems. He explained that his program regulates all wastewater and water that is injected into the subsurface, whether deep well injection or shallow well injection. The program is set up under a class system 1 – 5. In NH, the registrations are predominantly class 5 (shallow injection wells). He said that his program registers all geothermal systems at this time, both standing column, closed loop and DX systems. This information can be used as an inventory by the State Office of Energy to track energy uses and trends in NH.

Mr. Locker told the Board that DX systems are gaining popularity in NH because they are easy to install in a small space. He said that all DX systems use copper tubing. In most cases, the tubing is pre-pressurized at the factory.

Mr. Locker was asked about the life expectancy of the copper tubing. He replied that the only instance of failure that he was aware of was a case in Maine where the system was installed directly into a water well. He said the system had been in place for 20 years before it corroded through. He commented that DX systems are being installed around the world. The technology was developed in the 1960’s. He noted that the soils and groundwater in NH do tend to be more acidic than may be found in other areas, which may cause corrosion to take place sooner.

Mr. Locker was asked if his program requires the refrigerants used to be biodegradable. Mr. Locker explained that the refrigerants are not regulated; the systems are regulated from the standpoint that the refrigerants are not to be released. He said the problem lies in being able to detect when there has been a leak. Massachusetts requires pressure sensors on all DX systems. The pressure sensor is activated when there is a loss in pressure and then the system is automatically shut down. A certified individual is required to check and reset the system when this happens. Another method applies corrosion control by using an “impressed current”; if the current is broken the system shuts down. In the case of systems installed above the water table, if a leak occurs the refrigerants will volatilize, therefore not impacting the groundwater.

The Board members began to have discussion around the table regarding these concerns. Everyone seemed to agree that the copper tubing was not durable, but its properties as a “super conductor” make replacement with a more durable product unlikely. The theory behind the requirement that these systems be properly grouted is that if a leak should occur, the refrigerant will be contained by the grout. The Board members discussed problems with this philosophy; one being that until recently the rules did not require grouting, and most contractors have not been grouting these systems. Another weakness discussed is that the copper is rarely centered in the borehole, so in most cases one side of the tubing would have little to no grout around it. Mr. Wunsch said that when bentonite

first cures it typically has a pH of about 10, but what happens with the pH over time is unknown. Mr. Garside commented that once a refrigerant or a lubricant leaks, the damage has been done. We have no control over the systems that are already in the ground.

Mr. Locker explained that his program began tracking these systems because of these concerns. He said the UIC Program regulates the “injection of a substance into the ground”. These systems fall into a “grey area” because they do not meet the definition to be regulated under this program. He said that DES is looking into regulating these systems through best management practices.

Mr. Locker summarized some approaches that DES is considering to assure that these systems do not contaminate groundwater:

- Corrosion control
- Method to easily identify the refrigerant
- Operational pressure sensors
- Manifold protection
- As-Built plans

Mr. Smith asked about the safety of the Group I Refrigerants. Mr. Locker said they are the safest category. Mr. Locker went on to say that more environmentally friendly products are being developed. Mr. Smith asked if DES or the Board could mandate that only certain refrigerants be allowed. Mr. Pelletier replied that we would have to go through the rule making process. He said that we do not currently have the authority to regulate the refrigerants used. Mr. Pelletier said that in addition to regulating the types of refrigerants used, he also thought we should require corrosion controls on these systems because of the acidic conditions in NH.

Mr. Garside urged that we need to be pro-active with regard to this issue. We need to take action immediately because these systems are going into the ground now. He stressed that we should be most concerned with the substances going into these systems and less concerned with the construction aspects at this time.

Mr. Pelletier agreed with Mr. Garside. He said we should try to get rules written for this session. He suggested the possibility of referencing existing standards and gave an example of the “Ten State Standards” that the drinking water program references for large community water systems.

Mr. Garside asked the Board if they would like to invite an expert on refrigerants to talk on this issue at the next meeting. The Board agreed that was a good idea, and decided that a representative from the International Ground Source Heat Pump Association (“IGSHPA”) would be the best choice.

Break at 10:20 am.

Meeting reconvened at 10:34

Request for Exemption of We 603.03

Mr. Schofield reported on the matter of Robert Silva of Laconia, which had been discussed at the last meeting. Mr. Silva had requested an exemption to allow his non-conforming well head to remain below grade because it is located within the dwelling in the middle of a walkway. The Board decided to request pictures of the well at the last meeting and a letter was sent to Mr. Silva requesting the photographs. Mr. Schofield reported that to date, he has not received a response from Mr. Silva. The Board postponed action on this case pending a response from Mr. Silva.

Mr. Schofield informed the Board that since the last meeting, he has received 3 additional requests for exemptions from We 603.03. The first request he discussed had been submitted by Mr. Stanley Szetela for his property in Glen, NH. Mr. Szetela recently had to have his well pump serviced and the pump installer who did the work raised his well head, which had previously been below grade. Mr. Szeleta provided photographs of the well which is located in the middle of a parking lot that services an apartment building. The Board determined that an exemption should be granted in this case, with the requirement that the well head be encased in a water-tight vault with an H-20 rated cover.

Mr. Schofield described another similar case. He had been contacted by Brett Dashner, a licensed Pump Installer, regarding a customer in Sunapee, NH who he recently replaced a well pump for. Mr. Dashner had raised the well head to meet current code. The customer was very upset that the well head was raised and is refusing to pay Mr. Dashner. Mr. Schofield inspected this well and provided photographs he had taken for the Board to review. Mr. Schofield told the Board that he sent a letter to Mr. Dashner (copied to the property owner) that cites the statute and the rule requiring non-conforming wells to be brought up to code. The letter informs Mr. Dashner that he or the property owner may request an exemption from We 603.03. The Board will consider this case if an exemption is requested.

Mr. Schofield shared a related situation with the Board. A resident from Bedford called him very upset and left a message on his voicemail. She said her well pump had failed and she contacted a pump installer to look at her system. He told her that replacement of the pump would cost \$1,400., and raising the well head would cost \$1,700. He told her that the well head had to be raised. By the time Mr. Schofield was able to return her call, she said the work had already been completed. She said the contractor never told her that she had the right to refuse having the well head raised, nor did he tell her she could apply for an exemption. Mr. Schofield told the Board that he wanted to share this story with them because he feels that some contractors may be using the rules to take advantage of people by charging them an unreasonable price for the work.

Mr. Wunsch asked if we have a Fact Sheet pertaining to this issue. Mr. Schofield was not sure if there was an existing Fact Sheet on this subject.

Rules

Mr. Schofield handed out “camera ready” copies of the new rules to the Board members. He provided the cost estimates he had received from Graphic Services:

- 500 copies.....\$ 1,408.86
- 750 copies.....\$ 2,061.79

Mr. Schofield told the Board that at the last meeting he had suggested sending copies to all 500 licensed contractors. He said that may not be the best idea. He proposed sending a notice to the licensed contractors informing them of the new rules and letting them know they can request a free copy within a certain time frame (ie. 30 days).

Following some discussion regarding this matter, Mr. Pelletier suggested that we send all of the licensed contractors a letter informing them of the new rules and providing them with the URL to print their own copy. The letter should also state that if they do not have the ability to print the rules, they can request that a copy be mailed to them. Mr. Pelletier stressed that with the current state budget deficit, we can't be spending any more money than is absolutely necessary.

The Board decided to order 250 copies from Graphic Services at this time.

Previous Complaints

Sabin Guertin / Village Pump and Irrigation

This matter was continued from the last meeting. Mr. Schofield reported he had recently talked with Mr. Holland. He said Mr. Holland is anxious to correct the situation, but he has not heard from Mr. Guertin. The matter was continued until the next meeting.

Licensing

New Applicants

The first application for consideration was submitted by Jay Levesque with Forest Pump and Filter for a rotary drillers license.

The Board members expressed concerns regarding Mr. Levesque's work experience. It was also noted that the references Mr. Levesque provided did not satisfy the rule requirements because two of the references are employees of Mr. Levesque (only one employee is allowed to be used as a reference), and the third reference provided was from a plumber. The rule requires at least two of the references are from individuals from the well construction industry with personal knowledge of the applicants experience. The Board also had questions regarding the license held by Albert Menter, license #179. Mr. Schofield left the meeting temporarily to obtain this information from the database.

Recording was stopped at 11:25 am., while Mr. Schofield checked the database.

Meeting reconvened at 11:29 am.

Mr. Schofield reported that Albert Menter's license number was #1382, issued in August of 2005, and the business started filing well completion reports in October 2005.

The Board disqualified two of the remaining references provided by Mr. Levesque. It was decided that a letter should be sent to Mr. Levesque informing him that in addition to Mr. Menter, he needs to provide two other qualified references. The references should also verify Mr. Levesque's experience working on the drill rig.

The Board noted that the reference form should be revised to specifically ask if an applicant has actual experience at the controls of the drilling equipment.

The next license application for consideration was submitted by James Nelson of A.D.S. Water Treatment Systems; Culligan Central of NH for a Pump Installers License.

Mr. Schofield told the Board that Mr. Nelson is an employee of A.D.S. Water Treatment Systems. Mr. Nelson lists the "Registered Business Name" as Culligan Central of NH. Mr. Schofield said he checked the Secretary of State's website and found that "Culligan Central of NH" is not a registered business name. Mr. Schofield told the Board that he believes the license should be issued to A.D.S. Water Treatment Systems because they are a registered business. The Board agreed that the license should be issued under the registered business name.

Mr. Pelletier recommended that Mr. Schofield call Mr. Nelson to clarify the registered business issue. If Mr. Nelson objects to being licensed under A.D.S. Systems, he can register Culligan Central of NH prior to taking the license exam.

The Board voted unanimously to allow Mr. Nelson to sit for the exam.

The next license application for consideration was submitted by Steven Ploss with Maine Drilling and Blasting for a Rotary Drill License.

Following a short discussion about Mr. Ploss's qualifications, the Board voted unanimously to allow Mr. Ploss to sit for the exam.

Break at 11:40 am.

Reconvene at 12:02

General Discussion on Licensing

Mr. Smith made a motion to go into Executive Session. The motion was seconded by Mr. Garside. The Board voted unanimously to go into Executive Session to review legal advice issued by counsel.

The meeting went into Executive Session at 12:05 pm.

The meeting reconvened at 12:29 pm. Mr. Garside excused himself from the meeting.

Mr. Schofield told the Board that he wanted to clarify an issue with regard to individuals having their own license number, in addition to the business having a license number. He said that even though it had been allowed in the past, he did not want individuals working for a licensed business to submit well reports under their own license number. He explained that this has created problems. He stressed that from this point forward, all well reports should be submitted under the business license number.

Mr. Smith suggested that we could require the well report be filed under the business license number, but also require that the operator include their license number if they hold a license.

Mr. Schofield reported that the database is outdated and needs to be upgraded. He said it is a slow process, but the Bureau's databases are being upgraded.

Complaint Registry

Mr. Schofield discussed some concerns he had regarding posting of the complaint registry on the webpage, which the Board had suggested at a previous meeting. He provided the Membership with a print-out of how this data would appear in the registry. He said his main concern was the last column entitled "Action Comment"; this section contains information that is descriptive and could be interpreted as subjective. Mr. Schofield suggested that either the section not be included, or a determination be made by the Legal Unit before this information goes on-line.

Following some discussion, the Board was in favor of removing the "Action Comment" section from the website. The Membership discussed whether or not to keep the section in the database if it was useful to the program. Mr. Pelletier suggested that staff check with the Legal Unit with regard to that question.

Mr. Schofield discussed an additional concern he has with making database information available on-line. He stressed that all of the information contained in the database needs to be carefully reviewed for accuracy before it is posted on a website.

New Business**New Webpage Format**

Mr. Schofield commented briefly on the new webpage format. He said he didn't feel it was as attractive as it was before, but at least all of the information is there.

Well Contractors Installing Wells on Lots Served by Public Water Systems *(This item was not on the agenda)*

Mr. Schofield reported that this issue is becoming a reoccurring problem. He discussed a complaint that was received by DES from the Rolling Ridge Water Company in Bartlett, NH. When the franchise was approved by the PUC there were 31 lots on the water system; when they received the franchise, the number of lots was 25 because 6 of the property owners installed private wells on their lots.

Mr. Schofield also discussed another case involving a subdivision approved with a community water system where property owners are installing private wells on their lots. This situation involves the Lakeview Water Company in Alton, NH which was approved as a 32-lot subdivision. 30 of the lots now have private wells.

Mr. Schofield told the Board he wanted to bring this matter to their attention because under the new rules it is a violation to install a well on a lot in a subdivision that was approved with a community water system. If a property owner wishes to disconnect from a community water system and have a private water well constructed, the owner can request an amended subdivision approval from the NHDES. The owner would be required to hire a qualified person (engineer or septic system designer) to perform a site evaluation of the property and demonstrate that the lot meets NHDES requirements for both an on-site septic system and a well.

Mr. Schofield said that he included an article on this subject in the newsletter that was sent to all the licensed contractors with the license renewals this year.

The meeting was adjourned at 1:00 pm.